CLAIMS

1. A method of manufacturing a display device, comprising:

a first step of sequentially forming a first metal film, a first oxide film, and an optical filter on a first substrate, attaching a first support medium to a surface of the optical filter with a first peelable adhesive agent such that the first support medium faces the first substrate through the optical filter, and separating the first metal film from the first oxide film by a physical means;

a second step of forming a layer including a pixel over a surface of a second substrate, and attaching a third substrate to a surface of the layer including the pixel with a first adhesive material; and

a third step of attaching the first oxide film to another surface of the second substrate with a second adhesive material after the first and second steps, and removing the first peelable adhesive agent and the first support medium.

2. The method of manufacturing the display device according to claim 1, wherein the first substrate and the second substrate are any of a quartz substrate, a ceramic substrate, a silicon substrate, a metal substrate, and a stainless substrate, while the third substrate is plastic, a polarizing plate, or a polarizing plate having a retardation plate.

3. The method of manufacturing the display device according to claim 1, wherein after the third step, a surface of the optical filter is attached with plastic, a polarizing plate, or a polarizing plate having a retardation plate.

4. A method of manufacturing a display device, comprising:

a first step of sequentially forming a first metal film, a first oxide film, and an optical filter on a first substrate, attaching a second substrate to a surface of the optical filter with a first adhesive material such that the second substrate faces the first substrate through the optical filter, attaching a first support medium to a surface of the second

substrate with a first peelable adhesive agent, and separating the first metal film from the first oxide film by a physical means;

a second step of forming a layer including a pixel over a surface of a third substrate, and attaching a fourth substrate to a surface of the layer including the pixel with a second adhesive material; and

a third step of attaching the first oxide film to another surface of the third substrate with a third adhesive material after the first and second steps, and removing the first peelable adhesive agent and the first support medium.

5. A method of manufacturing a display device, comprising:

a first step of sequentially forming a first metal film, a first oxide film, and an optical filter on a first substrate, attaching a first support medium to a surface of the optical filter with a first peelable adhesive agent such that the first support medium faces the first substrate through the optical filter, separating the first metal film from the first oxide film by a physical means, and attaching a second substrate to a surface of the first oxide film with a first adhesive material and removing the first peelable adhesive agent and the first support medium so as to form an optical film;

a second step of forming a layer including a pixel on a surface of a third substrate, and attaching a fourth substrate to a surface of the layer including the pixel with a second adhesive material; and

a third step of attaching the optical filter to another surface of the third substrate with a third adhesive material after the first and second steps.

6. The method of manufacturing the display device according to claim 4 or claim 5, wherein the first substrate and the third substrate are any of a quartz substrate, a ceramic substrate, a silicon substrate, a metal substrate, and a stainless substrate, while the second substrate and the fourth substrate are any of plastic, a polarizing plate, and a polarizing plate having a retardation plate.

7. A method of manufacturing a display device, comprising:

a first step of sequentially forming a first metal film, a first oxide film, and an optical filter on a first substrate, attaching a first support medium to a surface of the optical filter with a first peelable adhesive agent such that the first support medium faces the first substrate through the optical filter, and separating the first metal film from the first oxide film by a physical means;

a second step of sequentially laminating a second metal film and a second oxide film on a second substrate, forming a layer including a pixel over the second oxide film, and attaching a third substrate to a surface of the layer including the pixel with a first adhesive material; and

a third step of separating the second metal film from the second oxide film by a physical means after the first and second steps, and attaching the first oxide film to the second oxide film with a second adhesive material.

8. The method of manufacturing the display device according to claim 7, wherein the first substrate and the second substrate are any of a quartz substrate, a ceramic substrate, a silicon substrate, a metal substrate, and a stainless substrate, while the third substrate and the fourth substrate are any of plastic, a polarizing plate, and a polarizing plate having a retardation plate.

9. The method of manufacturing the display device according to claim 7, wherein after the third step, a surface of the optical filter is attached with plastic, a polarizing plate, or a polarizing plate having a retardation plate.

10. A method of manufacturing a display device, comprising:

a first step of sequentially forming a first metal film, a first oxide film, and an optical filter on a first substrate, attaching a second substrate to a surface of the optical filter with a first adhesive material such that the second substrate faces the first substrate through the optical filter, attaching a first support medium to a surface of the second substrate with a first peelable adhesive agent, and separating the first metal film from the first oxide film by a physical means so as to form an optical film;

a second step of sequentially laminating a second metal film and a second oxide film on a third substrate, forming a layer including a pixel over the second oxide film, and attaching a fourth substrate to a surface of the layer including the pixel with a second adhesive material; and

a third step of separating the second metal film from the second oxide film by a physical means after the first and second steps, attaching the first oxide film to the second oxide film with a third adhesive material, and removing the first peelable adhesive agent and the first support medium.

11. A method of manufacturing a display device, comprising:

a first step of sequentially forming a first metal film, a first oxide film, and an optical filter on a first substrate, attaching a first support medium to a surface of the optical filter with a first peelable adhesive agent such that the first support medium faces the first substrate through the optical filter, separating the first metal film from the first oxide film by a physical means, and attaching a second substrate to a surface of the first oxide film with a first adhesive material and removing the first peelable adhesive agent and the first support medium so as to form an optical film;

a second step of sequentially laminating a second metal film and a second oxide film on a third substrate, forming a layer including a pixel over the second oxide film, and attaching a fourth substrate to a surface of the layer including the pixel with a second adhesive material; and

a third step of separating the second metal film from the second oxide film by a physical means after the first and second steps, attaching the optical filter to the second oxide film with a third adhesive material.

12. The method of manufacturing the display device according to claim 10 or claim 11, wherein the first substrate and the third substrate are any of a quartz substrate, a ceramic substrate, a silicon substrate, a metal substrate, and a stainless substrate, while the second substrate and the fourth substrate are any of plastic, a polarizing plate, and a polarizing plate having a retardation plate.

13. The method of manufacturing the display device according to any one of claim 7, 10 and 11, wherein a second metal oxide film is formed between the second metal film and the second oxide film simultaneously with forming the second metal film and the second oxide film.

14. The method of manufacturing the display device according to any one of claim 7, 10 and 11, wherein the second oxide film is formed after oxidizing a surface of the second metal film to form a second metal oxide film.

15. The method of manufacturing the display device according to any one of claim 7, 10 and 11, wherein a first metal oxide film is formed between the first metal film and the first oxide film simultaneously with forming the first metal film and the first oxide film.

16. The method of manufacturing the display device according to any one of claim 7, 10 and 11, wherein the first oxide film is formed after oxidizing a surface of the first metal film to form a first metal oxide film.

17. The method of manufacturing the display device according to claim 5, wherein the optical film includes the second substrate and the optical filter.

18. The method of manufacturing the display device according to claim 1 or claim 3, wherein a first pixel electrode is formed on a surface of the third substrate.

19. The method of manufacturing the display device according to any one of claims 4, 5, 10 and 11, wherein a first pixel electrode is formed on a surface of the fourth substrate.

20. The method of manufacturing the display device according to any one of

claims 1, 4, 5, 7, 10 and 11, wherein a semiconductor element and a pixel electrode connecting to the semiconductor element are formed.

21. The method of manufacturing the display device according to claim 20, wherein the semiconductor element is a TFT, an organic semiconductor transistor, a diode, or an MIM element.

22. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein the optical filter is a color filter or a color conversion filter.

23. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein the first metal film or the second metal film is formed of an element selected from titanium, aluminum, tantalum, tungsten, molybdenum, copper, chromium, neodymium, iron, nickel, cobalt, ruthenium, rhodium, palladium, osmium, iridium; a single layer formed of an alloy material or a compound material containing the above-mentioned elements as its main constituent; or a lamination layer thereof.

24. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein the first oxide film or the second oxide film is formed of silicon oxide, silicon oxynitride, or metal oxide.

25. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein the support medium is a quartz substrate, a metal substrate, or a ceramic substrate.

26. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein the first peelable adhesive agent is a reactive peelable adhesive material, a thermal peelable adhesive material, a light peelable

adhesive material, an anaerobic peelable adhesive material, or a member having adhesive layers made from one or more of the above adhesive materials on both surfaces thereof.

27. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein a first metal oxide film is formed between the first metal film and the first oxide film.

28. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein a second metal oxide film is formed between the second metal film and the second oxide film.

29. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein after forming a spacer on the surface of the layer including the pixel, the layer including the pixel is attached to the third substrate or the fourth substrate.

30. The method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11, wherein the display device is a liquid crystal display device, a light emitting display device, a digital micromirror device, a plasma display panel, a field emission display, or an electrophoretic display device.

31. An electronic appliance manufactured by the method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11.

32. A television manufactured by the method of manufacturing the display device according to any one of claims 1, 4, 5, 7, 10 and 11.